

REMARKS

1. Claims 1-29 are pending in the application. The Examiner is thanked for withdrawing previous rejections under 35 U.S.C. § 112, first paragraph, 35 U.S.C. § 102 (e), and also under 35 U.S.C. § 103(a). The present Office Action rejects all claims in view of 35 U.S.C. § 103(a). While there are no amendments to the claims in this response, a copy of the claims is included for the Examiner's convenience.

2. Claims 1-9, 12-19, and 21-27 are rejected under 35 U.S.C. § 103(a) in view of U.S. Pat. No. 6,325,807 to Like Que ("Que"), and further in view of U.S. Pat. No. 6,152,944 to Thomas Holman et al. ("Holman"). The rejection states that it would have been obvious to modify the Que device by adding the spiral cut of Holman to provide more flexibility to the device. Applicants traverse the rejections. The two references attempt to solve different problems, and are applied to the problem solved by the present application only in a very strained manner.

Que seeks to make a more flexible sheath for use in an endoscopic or laparoscopic procedure. Que solves the problem by making the sheath out of several layers, as shown in Figs. 5A-5B and 6A-6B. Alternatively, Que teaches selective trimming of the sheath in multiple, sequential steps, as shown in Figs. 8A-8C. In Fig. 8D, material on two sides is removed to form accordion-type folds, and in Fig. 8E, longitudinal slits are added. All these techniques are devoted to removing large amounts of material from the sheath to make it more flexible. See col. 6, lines 26-54. Que thus teaches making a sheath flexible by removing large quantities of material.

Holman seeks to solve a different problem. Holman does not seek a flexible catheter, but rather sleeves on the end of the catheter, to protect and heat-set a balloon, for later control of expansion of the balloon after the inner and outer sleeves are removed, and before the catheter is placed into a person. Col. 11, lines 21-24, and Abstract, lines 1-8. The two references seek to solve different problems, and are thus non-analogous art. M.P.E.P. 2141.01(a)(IV). Even if the art is considered "analogous," and thus combinable, Holman's sleeves 28, 40 are independent from the catheter 12, and there is no suggestion to apply a spiral cut to the catheter, rather than the sleeve.

Instead, the cuts are made to sleeves that are removed from the catheter before the catheter is deployed.

In addition, at least independent Claims 1 and 15 require that the proximal and distal portions of the cannula comprise a continuum of material or a continuum of metal. Que teaches several layers and Holman teaches three separate pieces, if not three separate materials. Thus, the references do not teach or suggest all the limitations of at least independent Claims 1 and 15. Independent Claim 27 requires that the cannula have a spiral cut from a longitudinal axis of the cannula, which, as noted above, is not taught or suggested. Accordingly, Holman and Que do not teach or suggest, individually or combined, at least one limitation from each of the independent claims of the application. Dependent Claims 2-14, 16-26, and 28-29 are also allowable because they depend from allowable independent claims.

Dependent claims

Que and Holman further fail to disclose a number of limitations of the dependent claims. The Office Action admits as much for Claims 2, 5, 6, 8, 13, 16, 17 and 22. See Office Action, p. 2, lines 16-19. In order to make a prima facie case for obviousness, the references must teach or suggest all the limitations of the claims. M.P.E.P. 2143 8th ed. rev. 3 at 2100-135 (emphasis added).

i. For example, the Office Action does not cite, and Que and Holman do not disclose or suggest, that the spiral cuts are from about 0.001 to about 0.002 inches (0.25 to about 0.5 mm) wide, as recited in Claim 2.

ii. They do not disclose or suggest that the cannula has an intermediate portion that is about 0.5 inches to about 2 inches (about 13 mm to about 51 mm) long, the intermediate portion proximal to the distal portion, and having a spiral cut with a pitch less than a pitch of the distal portion, as recited in Claim 5.

iii. They do not disclose or suggest an outer diameter of the cannula from about 0.22 inches (about 0.56 mm, 1.7 Fr) to about 0.34 inches (0.86 mm, 2.6 Fr), as recited in Claim 6.

At least Claims 2, 5, 6, 8, 13, 16, 17 and 22 are therefore also allowable because the references do not teach or suggest the limitations of the dependent claims.

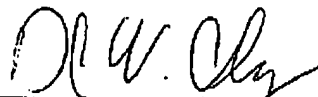
3. Claims 9 and 23 are rejected under 35 U.S.C. § 103(a) in view of U.S. Pat. No. 6,325,807 to Like Que ("Que"), and further in view of U.S. Pat. No. 6,152,944 to Thomas Holman et al. ("Holman") and U.S. Pat. No. 6,136,014 to Laksen Sirimanne et al. ("Sirimanne"). Claims 9 and 23 are allowable at least because they depend from allowable Claims 1 and 15.

4. Claims 10, 12, 20 and 28 are rejected under 35 U.S.C. § 103(a) in view of U.S. Pat. No. 6,325,807 to Like Que ("Que"), and further in view of U.S. Pat. No. 6,152,944 to Thomas Holman et al. ("Holman") and U.S. Pat. No. 4,927,426 to Steven Dretler ("Dretler"). Claims 10, 12, 20 and 28 are allowable at least because they depend from allowable Claims 1, 15 and 17.

5. Claims 11 and 29 are rejected under 35 U.S.C. § 103(a) in view of U.S. Pat. No. 6,325,807 to Like Que ("Que"), and further in view of U.S. Pat. No. 6,152,944 to Thomas Holman et al. ("Holman"), U.S. Pat. No. 4,927,426 to Steven Dretler ("Dretler"), and further in view of U.S. Pat. No. 4,557,256 to Tobias Goodman ("Goodman"). Claims 11 and 29 are allowable at least because they depend from allowable Claims 1 and 27.

6. Applicant respectfully requests the Examiner grant allowance of this application. The Examiner is invited to contact the undersigned attorney for the Applicant via telephone if such communication would expedite this application.

Respectfully submitted,



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